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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,890	04/29/2005	Pablo Vilato	259061US0PCT	9754
22850	7590	06/13/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER PAIK, SANG YEOP	
			ART UNIT	PAPER NUMBER
			3742	
			NOTIFICATION DATE	DELIVERY MODE
			06/13/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/509,890

Applicant(s)

VILATO ET AL.

Examiner

Sang Y. Paik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 5, 6, 11, 13, 16, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimatani et al (US 5,866,239).

Shimatani shows the glass ceramic plate for heating elements claimed including at least one enamel coating or paint provided substantially all of the upper surface of the plate, the enamel paint withstanding the temperature greater than 350 °C with a thickness .2-20 microns and having color pigments. Shimatani further shows that the glass ceramic has a composition having the claimed components including 60-75% silicon oxide, 15-25% aluminum oxide, and 2.5-5% lithium oxide; and the glass ceramic and the enamel are then subject to a ceramization heat-treatment. Also See column 5, lines 17-35. With respect to the recited L\* and a\* and b\*, they are inherently met by Shimatani having the same structure as the recited glass having the same components as that of the claimed glass.

With respect to claim 11, the recited haze is a property of the claimed glass ceramic that is presumed inherent. It is noted that when the structure recited in the prior art is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

3. Claims 1, 4, 7, 8, 11, 16, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto et al (US 5,691,254).

Sakamoto shows the glass ceramic plate claimed including a transparent or colored glass ceramic with an enamel coating or paint applied to a surface of the plate, the enamel coating withstanding the temperature greater than 350 °C, the enamel layer being between .2 to 20 microns, and the glass ceramic plate having the claimed composition including 60-75% silicon oxide, 15-25% aluminum oxide, and 2.5-5% lithium oxide exhibiting the claimed expansion coefficient. Also see column 3, line 65 to column 4, line 12. With respect to the recited L\* and a\* and b\*, they are inherently met by Sakamoto having the same structure as the recited glass having the same components as that of the claimed glass.

With respect to claim 11, the recited haze is a property of the claimed glass ceramic that is presumed inherent. It is noted that when the structure recited in the prior art is substantially identical to that of the claims, the claimed properties or functions are presumed to be inherent.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3, 14, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimatani et al (US 5,866,239) or Sakamoto et al (US 5,691,254) in view of Wennemann et al (US 7,009,150).

Shimatani or Sakamoto shows the glass-ceramic plate claimed except for a coat of paint on the lower surface of the plate.

Wennemann shows the glass ceramic claimed including a transparent glass ceramic plate with a full surface enamel coating or paint applied on the upper and lower sides of the plate.

Wennemann further shows that the coating or paint has the degradation temperature greater than 350 °C wherein the coating is capable of imparting white or milky glass ceramic meeting the claimed haze. The coating is heated at a temperature between 200-900 °C, preferably between 460-650 °C, which allows temperature variations, including by 10 to 60 °C. The coating also include additives including resins with a display such as LED-LCD devices provided on the surfaces of the plate and with heating elements provided under the plate.

In view of Wennemann, it would have been obvious to one of ordinary skill in the art to adapt Shimatani or Sakamoto with the coating or painted provided under or lower surface of the plate to enhance the appearance of the glass ceramic while withstanding a high heating temperature.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimatani et al (US 5,866,239) or Sakamoto et al (US 5,691,254) in view of Kornbluth (US 2,843,559) or Martin et al (US 2,866,720).

Shimatani or Sakamoto shows the glass ceramic plate claimed including the enamel coating except for silicone resin.

Kornbluth and Martin show that it is well known in the art that an enamel material contains silicone resin as the binder or vehicle solvent.

In view of Kornbluth or Martin, it would have been obvious to one of ordinary skill in the art to adapt Shimatani or Sakamoto with the enamel material provided with the silicone resin as

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the binder or vehicle solvent to provide a vitreous layer that can be effectively adhered to a base surface including the glass ceramic.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimatani et al (US 5,866,239) or Sakamoto et al (US 5,691,254) in view of Krause et al (US 6,914,223) or Poumey (US 4,833,288).

Shimatani or Sakamoto shows the glass ceramic plate claimed except the underlying induction heating elements.

Krause and Poumey show that it is well known in the art that the induction-heated cooking surfaces are provided with the transparent glass ceramic plates.

In view of Krause or Poumey, it would have been obvious to one of ordinary skill in the art to adapt Shimatani or Sakamoto with the induction heaters as another alternative heating means to provide with the cooking surface.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimatani et al (US 5,866,239) or Sakamoto et al (US 5,691,254) in view of Mewissen (US 4,902,876).

Shimatani or Sakamoto shows the glass ceramic plate claimed except showing the plate being mounted to an insulating support.

Mewissen shows a glass ceramic plate being supported on an insulating support without an intermediate complex intended for masking the inside the device.

In view of Mewissen, it would have been obvious to one of ordinary skill in the art to adapt Shimatani or Sakamoto with an insulating support to allow the heating elements to better provide a more concentrated cooking surfaces on the glass ceramic plate without.

***Response to Arguments***

9. Applicant's arguments filed 4/6/07 have been fully considered but they are not persuasive.

The applicant argues that the Sakamoto and Shimatani references do not show the claimed  $L^*$ ,  $a^*$  and  $b^*$  values. The applicant argues Sakamoto and Shimatani show the glass plates that have "black appearance" which would be within the recited range 82-87 of  $L^*$  where it is known that the black compositions have an  $L^*$  value of 0 or close to zero. This argument is not deemed persuasive since there is no definite degree of color for such "black appearance" in Shimatani or Shimatani, and having such  $L^*$  value, combined with other  $a^*$  and  $b^*$  values would also produce "black appearance". But, more importantly, since there is no other claim support, structure or components that would otherwise distinguish the claimed glass ceramic over that of the prior art, the applicant's arguments are not deemed persuasive to overcome the presumed inherency of such values.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Y. Paik whose telephone number is 571-272-4783. The examiner can normally be reached on M-F (6:30-3:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sang Y Paik  
Primary Examiner  
Art Unit 3742

Syp